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# CIA work yields new wrinkle in software

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**Question:** Who delivers copies of Pravda, the Soviet Communist Party newspaper, to all of President Reagan's men?

**Answer:** A radically different computer system used by the CIA and created by a group of University of Minnesota computer designers who call themselves Sedna Corp.

And now the St. Paul company hopes the expertise it developed through its spy connection will enable it to market its computer systems to libraries, nursing homes and hospitals, government service agencies and corporations.

The reason: Sedna's founders think they have learned how to leap the gap that separates modern computers (the "hardware") from the antiquated programming instructions (the "software") that make them operate. "It's widely believed that software is 15 years behind hardware," Sedna president Eugene Lourey said. "That may be too generous."

The company's great leap forward began when the CIA decided it needed a special computer system that would sort "tons of mail every day" — and sort it so that the most important government officials got their copies of foreign publications first, Lourey said.

First, the CIA contracted with the University of Minnesota in 1977 to adapt the university's biomedical library computer system. During that two-year, \$10,000 contract, the founders of Sedna worked on the project as university employees.

Later, while still working at the university, they took over the project as private consultants because "the university was uncomfortable with CIA linkage directly to the university," Lourey said. "They wanted us to do it on our consulting time."

University biomedical library director Glenn Brudvig disagreed. "I don't think there was any principle or policy (of the university) involved" in shifting the CIA project to the consultants, he said.

At any rate, the consultants' new company, called Pentanet, was launched in 1980 to continue the CIA project after the university's participation had ended. They were joined in the venture by Iver Iversen, a computer business consultant who now is chairman of the firm, and they were modestly successful: The firm earned \$150,000 working on the CIA project.

By 1981, the founders decided to sever all ties with the university so they could develop and sell the new software in the business world, Lourey said. Last year the founders renamed the company Sedna Corp. after an Eskimo sea goddess. In addition to Lourey and Iversen, the founders of the firm are Richard Mann, Rolf Peterson, Colleen Maier Travis and Don Norris.

The key to success, Lourey said, will be what they accomplished for the CIA. "It's a very demanding application, and this (University of Minnesota-developed) software was the best

they (the CIA) could find," he said. "We saved the CIA an enormous amount of money," perhaps three times the estimated \$600,000 the CIA spent on the project, he added.

What the CIA liked about Sedna's software was that it doesn't require any computer programming skills. It eliminates elaborate computer languages and substitutes a "fill in the blanks" approach that allows a non-technical person to create programs on a computer screen, Lourey said. That also means the Sedna software can be shaped to fit the needs of each person who uses the computer.

This radical approach will make a Sedna computer system, called a SIMS-1, much cheaper to buy and to operate than other computers, Lourey said.

That's partly because Sedna will resell Digital Equipment Corp. mini-computers without all the expensive standard software. With Sedna, there is no operating system containing basic computer instructions, no program written by a human programmer in computer languages like Fortran or Cobol, and no language translator, or compiler, to convert the program into computer code, Lourey said.

Another advantage is that Sedna software makes the computer operate more efficiently, enabling it to do the same job as a much larger computer, Lourey said. And the system is cheaper to operate because no programmers are needed.

The new software approach and the improved computer efficiency combine to create a \$20,000 to \$500,000 Sedna computer system that can replace a large \$1.5 million to \$3 million computer system, he said.

Clearly, the company believes it is on to something the rest of the computer industry has missed. "Existing software is obsolete, and everybody knows it," Lourey said.

"The competition between the computer manufacturers is at the hardware level," said Iversen.

What stands between Sedna and financial success, Lourey said, are the tight budgets of potential computer purchasers and the reluctance of computer users to abandon their huge investments in conventional computer software.

While the privately held, nine-employee firm doesn't disclose details of its finances, Iversen said the company will make enough sales to break even on expenses for the fiscal year ending in June.

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